



GTI Lecture

History and Culture of India

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Current Leaders



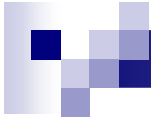
sworn-in: President Pratibha Patil and Prime Minister Manmohan Singh with Mohammad Hamid Ansari and his wife Salma after Mr. Ansari was sworn in Vice-President at the Rashtrapati Bhavan in New Delhi on Saturday.

India and Neighbors



India Close-up





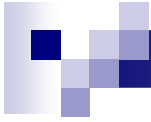
Albert Einstein said:

**We owe a lot to the Indians, who
taught us how to count, without which
no worthwhile scientific discovery
could have been made**

Land of Contrast - Poverty

- There are 250 million poor people in India





But,

- Three of the 20 most riches people in the world are from India.



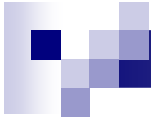
Culturally Rich - Inventions

- The digit zero and the numbering system
- Chess
- Algebra, Trigonometry, and Calculus
- The decimal system
- The game of Snakes and Ladders
- The value of “pi”
- Noble prizes in Literature, Physics, Economics, Peace, and Medicine



And,

- Ayurveda is the earliest literature of medicine known to mankind. The father of medicine, Charaka, practiced medicine 2500 years ago.
- Until 1896, India was the only source for diamonds to the world
- India never invaded any country in her 10,000 years of history
- **Hinduism, Buddhism, Jainism, and Sikhism** borne in India and followed by 25% of the world's population



Achievement made by Indian Engineers in the Silicon Valley include:

- ☐ Vinod Khosla Founded Sun Microsystems
- ☐ Vinod Dham Invented Pentium Microprocessor
- ☐ Sabeer Bhatia created and founded Hotmail



There are 3.22 millions Indians in USA (1.5% of population), but they constitute

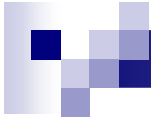
- 38% of doctors
- 12% scientists
- 36% of NASA scientists
- 34% of Microsoft employees
- 28% of IBM employees
- 17% of INTEL scientists
- 13% of XEROX employees



History of India

Divided in 7 Periods

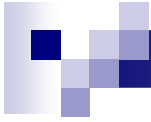
1. Original Indians (1700BC – 3300BC)
 - Indus Valley Civilization: Mohenja-daro and Harappa People
2. Aryans (2500BC – 322BC)
 - India's Root Culture
3. The Mauryan Empire (322BC – 188BC)
 - Spread of Buddhism



4. Gupta Period (320AD – 480AD)
 - ☐ Golden Age of India
5. Muslim Period (1175AD – 1800AD)
 - ☐ Turks and Mughals
6. European Rule (1800AD – 1947AD)
 - ☐ Portuguese, French, Dutch, and English
7. Independence and Democratic India

1. Indus Valley Civilization (1700BC – 3300BC)





Indus Valley Civilization

- Excavation in Northwest part of Pakistan has discovered civilization that is over 5,000 years old.
- This is the period where people in the rest of the world were nomadic



The artifacts discovered from the excavation reveal the knowledge of:

- Urban planning
- Sanitation system
- Advancements in Art and science
- Agriculture and trade
- Engineering – metallurgy
- Medicine – dentistry
- Peaceful egalitarian society

Remains of a 5,000 years old city



**Lower Town: Main Street HR/VS area and
stupa view**

Sewage System – view of a drain



Corbelled Drain exiting the Great Bath

Same size Houses – Egalitarian Society



First Street, DK-G Area

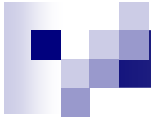
Sindhu River – Navigation Know-how



**Ferry boat on the Indus River near
Mohenjodaro**

← 95 →

Flat bottomed ferry boats are used even today to help travelers cross the Indus River near Mohenjo-daro.




Impact of Indus Valley Civilization

- Legacy of knowledge and appreciation of arts, science, engineering, and peaceful co-existence
- Manifested for centuries in India and by Indians living abroad through achievements in:
 - Engineering
 - Science
 - Medicine
 - Arts



2. Aryans (2500BC – 322BC)

- Group of **nomadic tribes** who had originally inhabited Central Asia (There is a dispute on this)
- Tall, fair haired, with clear cut features, they settled in Punjab, in the Indus Valley River region.
- Fought with the original people of Indus Valley Civilization, who were dark skin and known as Dasyus or Dravidians
- The superiority of the Aryans resulted in the Dravidian submission and retirement to the south.

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- The Aryan society was very well organized, ruled by a monarch.
 - Practiced the four **Vedas**
 - Caste system was introduced and practiced, based on one's profession:
 - **Brahmins**: Priests, teachers, intellectuals
 - **Khsatriyas**: Warriors, soldiers
 - **Vashya**: Traders, merchants, peasants
 - **Shudras**: People in service of others
 - Aryan period ended At the end of 322BC.



Cultural Impact of Aryans

- The culture of the Aryan period exist today and has been an integral part of Hindus all over the world.
- All Hindus accept Vedas as their most sacred scripture.
- Hindu religion originated with Aryans
- With the invasion of Persian kings Cyrus and Darius in the 500 BC, there were significant changes and commingling of Aryan and Persian culture.



Persian and Greek Invasion

- The Persian Invasion in 500BC, and the invasion of Alexander the Great of Greece in 327 BC, changed the Indian culture for ever.
- The most significant impact of this period was:
 - (1) Cultural mixing
 - (2) Establishment of contacts with foreign countries



3. Mauryan Empire (322BC -188BC)

- The Mauryans were better rulers and culturally rich.
- They had a highly centralized and hierarchical government, well developed trade and commerce, welfare of foreigners, maintenance of public places including markets, and temples.
- The most significant ruler of this period was Emperor Ashoka who converted to Buddhism and introduced Buddhism outside India
- After the death of Ashoka, the Mauryan Empire disintegrated rapidly and all of South Asia fragmented into regional powers.



Cultural Impact of Mauryans

- Origin of non-violence in India
 - War in [Kalinga](#)
- Ashoka promoted non-violence, along with Buddhism.
- spread of Buddhism to neighboring countries of China, Thailand, Vietnam, Japan, etc.
- Education and Intellectual movement
 - The World's first university was established in India. More than 10,500 students from all over the world studied more than 60 subjects.

Mauryan Art – Ajanta Ellora Caves



Ajanta and Ellora Caves – One piece carving



Symbol of non-violence and secularism

- Ashoka Lion and Chakra
- Symbol on Indian currency and flag





4. Gupta Period (320 AD – 480 AD)

- After the decline of Mauryans, Gupta rulers rose to power
- The Gupta period in Indian history is known as the **Golden Age** of India.
- Era of the most advanced civilization, flush with wealth, higher education, trade with foreign countries, and an overall happy life.
- Religious tolerance and freedom of worship
- Period of **Hindu renaissance**.

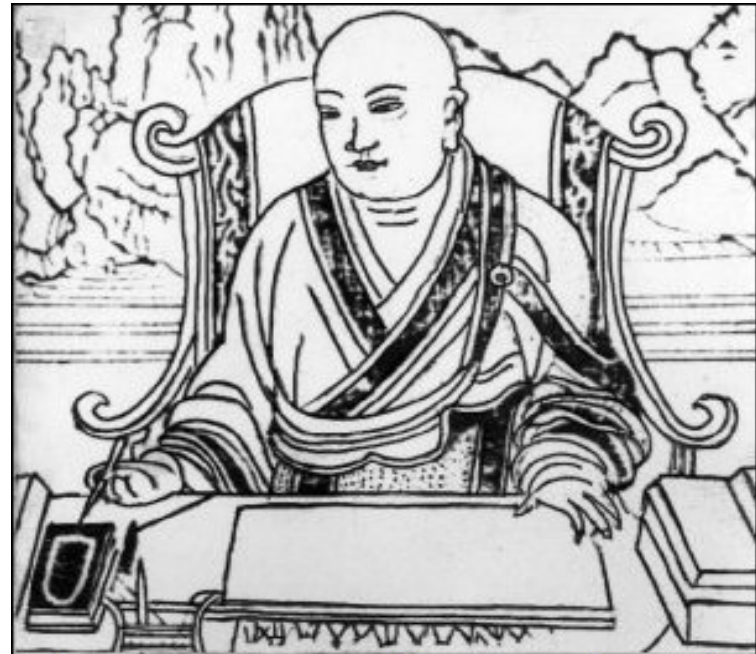


Impact of the Gupta Period

- Emperor Ashoka promoted Buddhism, but Gupta rulers showed a preference for Hindu religion
- Music, architecture, sculptures and painting were at its best.
- Various copper statues images of Buddha reflect the craftsmanship of the Gupta period.
- After the death of the last Gupta ruler in 570 AD, the Gupta empire declined and broke off.

Gupta Period (320 AD – 480 AD)

- Huien Tsang has provided a good historical account of the life in this period.



Hiun Tsang at Nalanda University



Foreign Invasions

Due to its wealth and culture, India has attracted foreigners throughout its history:

- Persian invasion in 500BC
- Greek Invasion in 327 BC
- Turks in 1175AD
- Mughal in 1526
- Portuguese in 16th century
- Dutch and French in 17th century
- English in 18th through 20th century



5. Muslim Period – Turks and Mughals (1175 – 1800 AD)

- Turks from Central Asia invaded India and ruled from 1175 to 1340 AD.
- Attracted by India's wealth, looted and destroyed temples.
- More interested in wealth rather than politics and were soon replaced by the Mughals.
- The Turks' dominance ended in 1526 with the invasion of Mughals from central Asia

The Turks

- Fierce and famous Turk invader, Mahmud of Ghazni



Mahmud of Ghazni

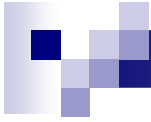


Muslim Period (1175 – 1800 AD) – The Mughals

- Nomadic people of central Asia. The first invader was Babur, related to Genghis Khan.
- He defeated Rajputs and Afgans and ruled in India
- Babar's successors: Akbar and Shahjahan are the most prominent in Indian history.
- Akbar is known to be the first Muslim emperor to unite Hindus and Muslims, and marrying a Hindu woman.
- Shahjahan is known in history for building the world famous monument Tajmahal.

- Shahjahan built the Tajmahal in memory of his deceased wife Noorjahan, who died on June 17, 1631 in child birth.





- Aurangzeb was the last significant ruler of the Mughal Empire, preceding the european rulers
- His successors were weak and corrupt, Aurangzeb is generally regarded as the last significant Mughal ruler.
- The Hindu Maratha Empire mostly replaced Mughal rule during the rest of the 18th century

- Last Mughal Emperor -
Aurangzeb



Cultural Impact of Muslim Period



- Today, 13.4% of India's population is Muslim
- Muslims are an integral part of the Indian culture.

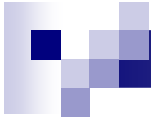


- Hindus and Muslims live side by side
- However, Inter-religious marriages are rare



6. European Rule (1800 – 1947) – Discovery of India

- The invasion of Alexander had boosted trade contacts outside India
- Italians and Portuguese made several attempts to find an easy route to India that will avoid the hostile route through northern part of India.
- Columbus, in his quest to find India ended up in North America and erroneously thought he had reached India, calling the native of the new land as Indians.

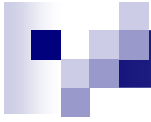


- On April, 1498 Vasco da Gama reached the western coast of India and the quest for Europeans to reach India was fulfilled.
- Subsequent to Vasco Da Gama's arrival in India, the Portuguese fought and established their dominance and appointed Portuguese Governor in India.
- After a century, due to the incompetent administration, the Portuguese power began to decline.

European Rule (1800 – 1947)

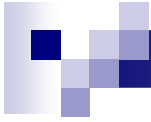


- Portuguese Explorere – Vasco da Gama



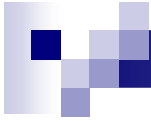
Dutch Rule

- After the Portuguese, the Dutch rose to power and established the Dutch East India Company
- Only after a short rule, the Dutch East India Company declined under the pressure from the English.
- The British navy was much superior to the Dutch and the English controlled the Dutch possessions in India.

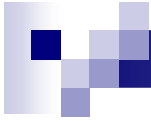


The British Rule

- Lured by the Portuguese's success in India, the English too wished to have their share of wealth and profits.
- Despite the looting and plundering by Muslims and east Europeans, India was still one of the most rich countries in the world.
- In 1600 Queen Elizabeth granted a charter to a company of merchants to trade freely with India.



- British East India Company flourished and controlled the whole country.
- India was ruled by British from 1858 to 1947. Lord Mount Batten was the last governor general to rule over India.
- The independence movement by Indians ended the British rule on August 15, 1947.



Impact of Europeans

- The impact of Portuguese and Dutch rule was insignificant
- However, there was a significant impact of the British rule
- Before the advent of the British, India was ruled by selfish kingdoms under rival chiefs and rulers.



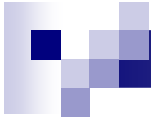
Impact of British Rule

- The British influence inspired western education and thoughts:
 - Created a new educated class.
 - Created a common language – English
 - Inspired freedom and exchange of ideas
- Built a railway system
 - The largest single employer in the world today, employing over a million people.
- Created the largest English speaking nation in the world

7. Independence and Modern India

- Although unintended, the British rule helped Indians become organized and united for freedom.
- Gandhi's non-violence movement for freedom appealed to the civilized world and helped achieve India's freedom.





Independence of India

- The main historical figures of the Indian independence movement include Mahatma Gandhi, Jawaharlal Nehru, and Mohammad Ali Jinnah.
- India and Pakistan become free and independent countries on August 15, 1947
- Nehru became the first prime minister of newly formed democratic country of India

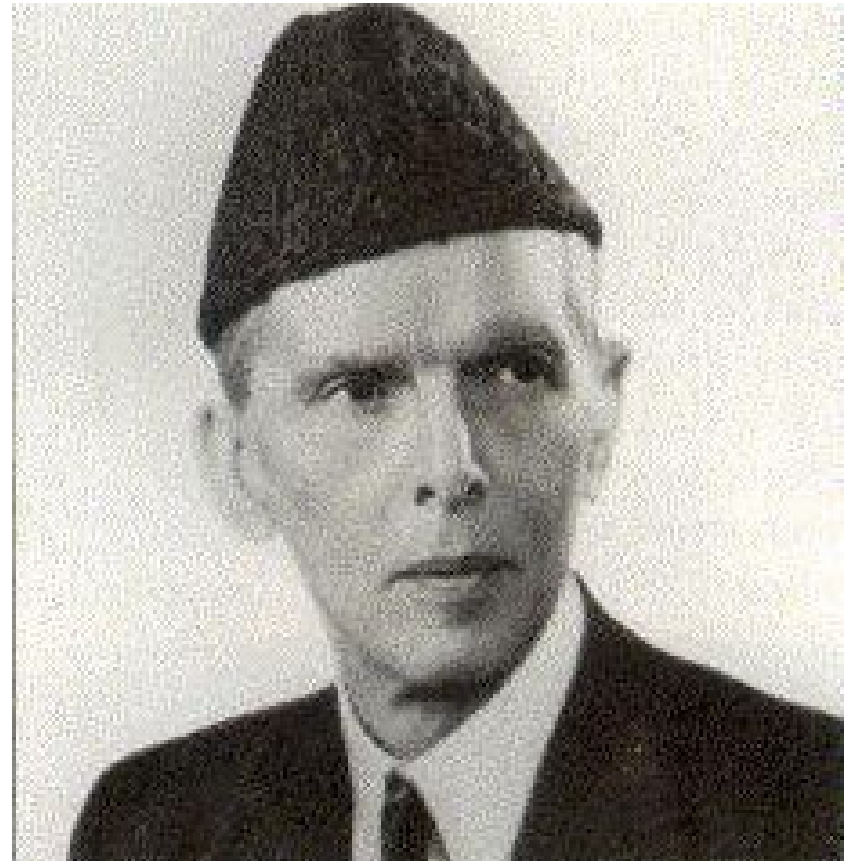
Independence of India

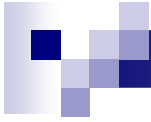


Jawaharlal Nehru talks to Pakistan prime minister [Muhammad Ali Bogra](#) during his [1953](#) visit to [Karachi](#).

Independence of India

- Muhammad Ali Jinnah became the first governor general of Pakistan.





Sad Chapter - Partition of India and Pakistan

- At independence, the British partitioned India into India and Pakistan
- Two parts of India were divided, Bengal and Punjab. The eastern part of Bangal became East Pakistan and western part of Punjab formed the West Pakistan.
- Mohandas Gandhi believed that Hindus and Muslims could and should live in amity and opposed the partition

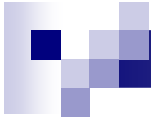


Partition of India and Pakistan

- Gandhi's support for Muslims and low caste hindus enraged many people. (Gandhi was assassinated soon after Partition by a Hindu Nationalist)
- Once the lines of partition were established, about 14.5 million people crossed the borders to seek shelter in religious majority.

- Based on 1951 Census of displaced persons, 7,226,000 Muslims went to Pakistan from India while 7,249,000 Hindus and Sikhs moved to India from Pakistan after partition.
- East and West Pakistan, shown in green



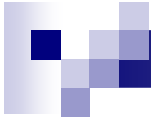


- The newly formed governments were completely unequipped to deal with migrations of such staggering magnitude, and massive violence and slaughter occurred on both sides of the border.
- Estimates of the number of deaths range around 500,000, with high estimates at 1,000,000.

Carnage after partition



In a couple of months in the summer of 1947, a million people were slaughtered on both sides in the religious rioting. Here, bodies of the victims of rioting are picked up from a city street.




Independence and Democratic India

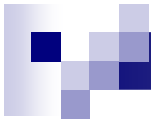
- The Constitution declares India to be a socialist democratic republic.
- It adopted features from the constitution of many countries, especially, the Parliamentary form of government from Britain and the Federal Structure of governance from USA.
- As Pakistan went through several dictators, including the current one, India has remained as the largest democratic country in the world.



FACTS and Statistics

- India is one of the ten nuclear state in the world
- Has a labour force of over 509 million, 60% of which is employed in agriculture and related industries
- India is the second most populous country, and the most populous democracy in the world.
- It is the world's 4th largest economy in terms of purchasing power.
- India's median age is 24.9, and the population growth rate of 1.38% per annum.

- 
- Hindi is the national language. There are 21 other languages that are either spoken or have classical status. The number of dialects in India is as high as 1,652.
 - Over 800 million Indians, or about 80.5% of the country's population, are Hindu
 - Other religious groups include Christians (2.3%), Sikhs (1.9%), Buddhists (0.8%), Jains (0.4%)
 - And minorities include Jews, Zoroastrians, Bahá'ís and aboriginals



- The national gender ratio is 944 females per 1,000 males.
- Major industries include automobiles, cement, chemicals, consumer electronics, food processing, machinery, mining, petroleum, pharmaceuticals, steel, transportation equipment, and textiles.
- Almost 70% of Indians reside in rural areas.
- India's largest cities are Mumbai (formerly Bombay), Kolkata (formerly Calcutta), Delhi, Chennai (formerly Madras), Bangalore, Hyderabad and Ahmedabad
- It is the largest democracy in the world

Glimpse of everyday Life in India



shopper

Raj Ghat



Raj Ghat, not far from the banks of the Yamuna River, has a simple black marble memorial to Mahatma Gandhi, marking the spot where he was cremated following his assassination in 1948.



cow drawing water from a well
(color of horns indicates owner's political party)



temple rules



snake charmer



Muslim man prefers "Coke"



family transport by pedicab



street scene



in the style of Southern India




the school group photo



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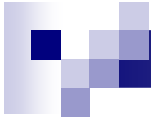
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Environment - current issues

- deforestation
- soil erosion
- overgrazing
- desertification
- vehicle emissions
- water pollution from raw sewage and runoff of agricultural pesticides
- tap water is not potable throughout the country
- huge and growing population is overstraining natural resources



Population

- *Population: 1,129,866,154 (July 2007)*
- *0-14 years: 31.8%*
- *15-64 years: 63.1%*
- *65 years and over: 5.1%*
- Median Age: 24.8
- Growth Rate: 1.606% (2007)



Economy

- GDP: 4.164 trillion (2006 est) (6th)
- GDP Growth rate: 9.4% (2206 est.) (23rd)
- GDP per Capita: \$3,800 (2006 est.) (154th)
- Labor force: 506.9 million (2006 est.)
- Labor force - by occupation:
 - *agriculture*: 60%
 - *industry*: 12%
 - *services*: 28% (2003)
- Unemployment rate: 7.8% (2006 est.)
- Population below poverty line: 25% (2002 est.)



Birth of Religions

■ Religion	How Old
■ Hindu	4000 – 2500 BC
■ Judaism	2000 BC
■ Buddhism	560 -490 BC
■ Shinto, Confucianism	500 BC
■ Jain	420 BC
■ Christianity	30 BC
■ Islam	622 AD
■ Sikhism	1500 AD
■ Bahai	1863

Street Scene



Delhi Haat



Delhi Haat



Shopping Lane



Shops in the Tibetan Settlement, Delhi (1)